

Poriferan and Cnidarian Review

1. Poriferan defense.
2. Cnidarian that produced calcium carbonate walls.
3. Stinging cells of Cnidarians.
4. Sponge symmetry.
5. Cnidarian symmetry.
6. An organism which produces egg and sperm.
7. Interior space in Cnidarians where food is digested.
8. Sessile body form of Cnidarians.
9. Free swimming Cnidarians body form.
10. Layer between endoderm and ectoderm of Cnidarians.
11. Asexual reproduction in sponges.
12. Name of Poriferans' one opening.
13. Method of gas exchange in sponges and Cnidarians.
14. Number of germ layers in sponges and Cnidarians.
15. Do Poriferans have true tissues?
16. Do Cnidarians have true tissues?
17. Cnidarian examples.
18. Asexual reproduction in hydra.
19. Cells whose flagella move water through a sponge.
20. Feeding mechanism for sponges.

Discuss:

1. What evidence can be given to support the statement ***Poriferan cells still retain some independence?***
2. How are the functions of cnidocytes and spicules similar?
3. Explain water movement through a sponge.
4. Identify why Cnidarians are more complex animals than Poriferans.

Worm Review

1. Cells that regulate water in a flatworm.
2. Two openings in roundworms.
3. Circulatory system in Annelids.
4. Respiration in worms.
5. Planarian phylum.
6. Major digestive organ in Nematodes.
7. Structure on earthworms that form a protective coating for eggs.
8. Leech phylum.
9. Platyhelminthe examples.
10. Hair-like structures on each segment of an earthworm.
11. Excretory organ for nitrogen waste in Annelids.
12. Food storage organ in earthworms.
13. Fleshy projections on marine worms.
14. Nematode examples.
15. Food grinding organs in earthworms.
16. First phylum showing cephalization.
17. Phylum name for roundworms.
18. Digestive system for flatworms.
19. Number of germ layers in worms.
20. Wavelike contraction of muscle in earthworms.
21. Symmetry of worms.
22. Acoelomic worm phylum.
23. Pseudocoelomic worm phylum.
24. Coelomic worm phylum.
25. Muscular structure in worms that pulls in food.
26. Annelid examples.

Discuss:

1. Why do tape worms lack a digestive system?
2. Why is the digestive system of a round worm an improvement over a flatworm?
3. Why is a circulatory system a useful adaptation in Annelids?
4. Explain the increase in complexity from Platyhelminthes to Nematodes to Annelids.

Mollusk, Echinoderm and Arthropod Review

1. Latin for “soft”.
2. Classes of Mollusks.
3. Gastropod examples.
4. Echinoderm symmetry.
5. Cephalopod circulation.
6. Mollusk larvae.
7. Arthropod circulation.
8. Outer skeleton.
9. Bivalve examples.
10. Form plates covered by epidermis.
11. Gastropod feeding.
12. Phylum with jointed appendages.
13. Mollusk locomotion.
14. Bivalve feeding.
15. Arthropod respiratory organs.
16. Phylum evolved from a segmented ancestor.
17. Openings connecting tracheal system to outside.
18. Cephalopod examples.
19. Fused head and thorax.
20. Tube feet.
21. Most advanced mollusk class.
22. A terrestrial mollusk.
23. “spiny skin”
24. Arthropod excretory organs.
25. Echinoderm examples.
26. “stomach foot”
27. “head foot”
28. Fluid filled tubes in echinoderms.
29. Three arthropod body sections.

Discuss

1. What is unique about mollusk larvae?
2. How do Cephalopods differ from other Mollusks?
3. Compare food getting in the three classes of Mollusks.
4. How are octopus designed to be successful predators?
5. What embryological feature link Echinoderms to Chordates?

Comparing Invertebrates Review

1. The study of animal life.
2. Groups of cells working together to perform the same function.
3. Segmented worm phylum.
4. Sponge phylum.
5. Organs form -----.
6. Round worm phylum.
7. Sea urchin phylum.
8. Flatworm phylum.
9. Tissues form -----.
10. The opposite of motile.
11. Simplest digestive tract.
12. Hollow ball of cells.
13. System where blood stays in blood vessels.
14. Tube-like structures that produce urine.
15. Snail phylum.
16. Openings in insects to allow air flow.
17. When eggs are fertilized outside the female's body.
18. Gives rise to the circulatory, muscular and reproductive systems.
19. Jellyfish phylum.
20. Rear of an animal.
21. Forms the outside of the body.
22. New individuals are produced by outgrowths in the body wall.
23. Nervous system in Cnidarians.
24. Muscles contract against a fluid filled body cavity.
25. Small clumps of nervous tissue.
26. Complex digestive tract.
27. When individual animals are a single sex.
28. Folded blastula.
29. Feathery respiratory organs in aquatic invertebrates.
30. Forms the gut.
31. Forms as a result of fertilization.
32. Hard body covering made of chitin.
33. System where blood leaves vessels and moves through sinuses.
34. Digestion occurring inside cells.
35. Symmetry of humans.
36. Layer of membrane that lines the body cavity.
37. Animals that have a distinct body cavity.
38. When eggs are fertilized inside the female's body.

39. Structural support system located inside the body.
40. Symmetry of a sea star.
41. Series of tubes in insect bodies to allow air flow.
42. Belly side of an animal.
43. Saclike organs in insects that produce uric acid.
44. Side of an animal.
45. Head of an animal.
46. Eliminate excess water in flatworms.
47. Asexual reproduction when an individual divides in two.
48. A body cavity.
49. Digestion occurring outside cells.
50. Spider respiratory organ.
51. Concentration of nerves at anterior end.
52. Animals that have a fluid filled body cavity, partially lined with mesoderm.
53. Symmetry of a sponge.
54. Animals that lack a body cavity.
55. Back side of an animal.
56. Individuals that produce both egg and sperm cells.

Discuss

1. Describe the 3 types of body cavity arrangement and how they increase in complexity.
2. Why is bilateral symmetry more complex than radial?
3. What is the basic mechanism of respiration in animals?
4. Why is open digestion more complex than blind?